

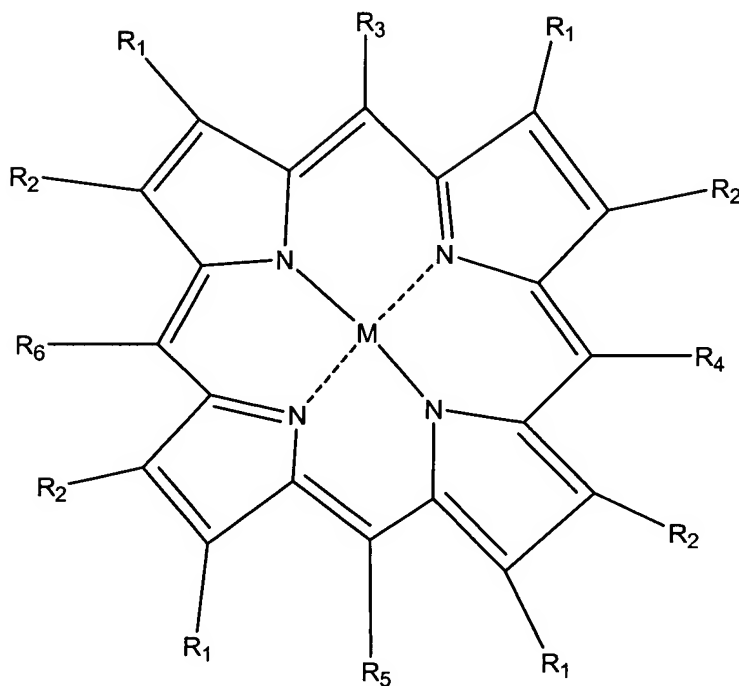
## **Appendix A – Pending Claims**

(For convenience of reference; no new amendments are presented)

1. (previously presented) A method for treating a human immunodeficiency virus infection in a human patient, said method comprising administering to the patient an effective amount of a compound comprising a porphyrin macrocycle, and further comprising one or more carboranyl groups that are linked to the porphyrin macrocycle by carbon-carbon bonding.

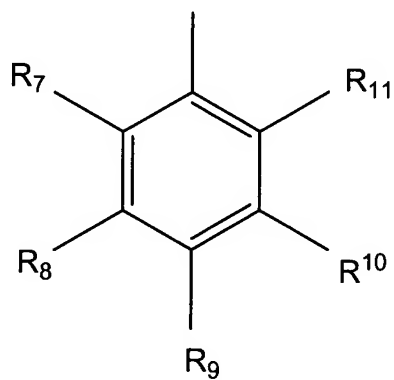
2 -3 (canceled)

4. (original) A method as recited in Claim 1, wherein the compound has structure I:



I

wherein M is 2H or a metal ion; R<sub>1</sub> and R<sub>2</sub> are each independently hydrogen, C<sub>1</sub> to C<sub>4</sub> alkyl or hydroxyalkyl; and R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are each independently hydrogen, phenyl, or substituted phenyl having structure II:



II

wherein R7, R8, R9, R10, and R11 are independently hydrogen or a carboranyl group, wherein such a carboranyl group is linked to the phenyl group by a carbon-carbon bond; and wherein one or two of R7, R8, R9, R10, and R11 are hydrogen, halide, hydroxide, alkoxide, sulfonate, or a substituted or unsubstituted alkyl or aryl; or such a carboranyl group; and

wherein at least one of R3, R4, R5, and R6 is a substituted phenyl having structure II and having at least one such a carboranyl group.

5. (original) A method as recited in Claim 4, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

6. (withdrawn) A method as recited in Claim 4, wherein each of R3, R4, R5, and R6 is a substituted phenyl having structure II and each having at least one such a carboranyl group.

7. (original) A method as recited in Claim 4, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

8. (previously presented) A method as recited in Claim 1, additionally comprising the step of exposing tissue of the patient to light having a wavelength, intensity, and duration sufficient to significantly enhance the compound's treatment of viral infection.

9. (previously presented) A method as recited in Claim 1, wherein the compound is selected from the group consisting of Compounds 4, 6, 10, 12, 16, 18, 22, 24, 31, and 33, as depicted in Figures 1, 2, 3, 4, and 6.

**10.** (withdrawn) A method as recited in Claim 1, wherein the compound is Compound **16**.

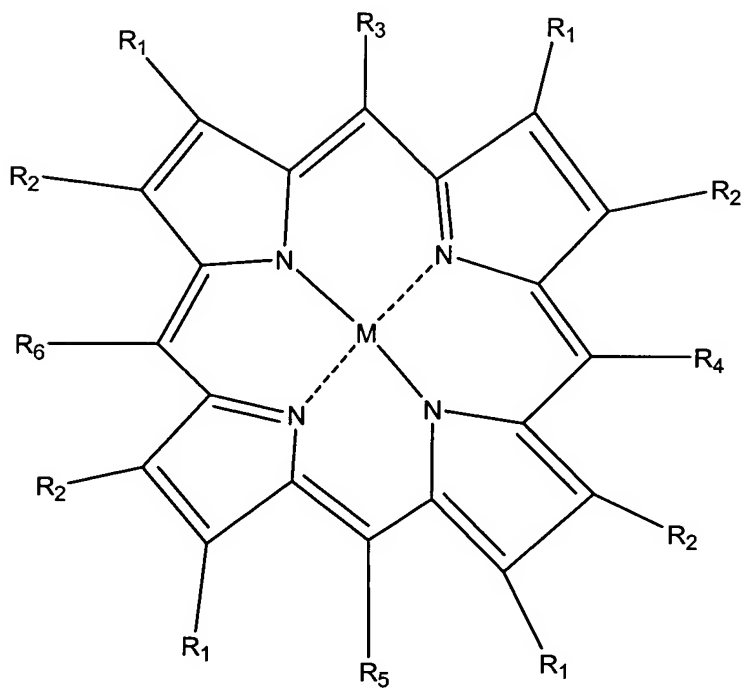
**11.** (withdrawn) A method as recited in Claim 1, wherein the compound is Compound **31**.

**12.** (original) A method as recited in Claim 1, wherein the compound is Compound **33**.

**13.** (previously presented, and withdrawn) A method for killing the human immunodeficiency virus in or on a nonliving material, said method comprising treating the material with an effective amount of a compound comprising a porphyrin macrocycle, and further comprising one or more carboranyl groups that are linked to the porphyrin macrocycle by carbon-carbon bonding.

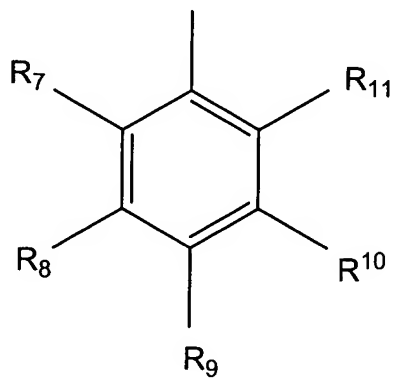
**14.** (canceled)

15. (original) A method as recited in Claim 13, wherein the compound has structure I:



I

wherein M is 2H or a metal ion; R<sub>1</sub> and R<sub>2</sub> are each independently hydrogen, C<sub>1</sub> to C<sub>4</sub> alkyl or hydroxyalkyl; and R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are each independently hydrogen, phenyl, or substituted phenyl having structure II:



II

wherein R7, R8, R9, R10, and R11 are independently hydrogen or a carboranyl group, wherein such a carboranyl group is linked to the phenyl group by a carbon-carbon bond; and wherein one or two of R7, R8, R9, R10, and R11 are hydrogen, halide, hydroxide, alkoxide, sulfonate, or a substituted or unsubstituted alkyl or aryl; or such a carboranyl group; and

wherein at least one of R3, R4, R5, and R6 is a substituted phenyl having structure II and having at least one such a carboranyl group.

**16.** (original) A method as recited in Claim 15, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

**17.** (withdrawn) A method as recited in Claim 15, wherein each of R3, R4, R5, and R6 is a substituted phenyl having structure II and each having at least one such a carboranyl group.

**18.** (original) A method as recited in Claim 15, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

**19.** (previously presented) A method as recited in Claim 13, additionally comprising the step of exposing the material to light having a wavelength, intensity, and duration sufficient to significantly enhance the compound's killing of viruses.

**20.** (previously presented) A method as recited in Claim 13, wherein the compound is selected from the group consisting of Compounds **4, 6, 10, 12, 16, 18, 22, 24, 31, and 33**, as depicted in Figures 1, 2, 3, 4, and 6.

**21.** (withdrawn) A method as recited in Claim 13, wherein the compound is Compound **16**.

**22.** (withdrawn) A method as recited in Claim 13, wherein the compound is Compound **31**.

**23.** (original) A method as recited in Claim 13, wherein the compound is Compound **33**.